

Select Problem Indicators by Gender

According to a report by the National Center on Addiction and Substance Abuse at Colombia University entitled, *The Formative Years: Pathways to Substance Abuse Among Girls and Young Women Ages 8 – 22*, girls may be more vulnerable to becoming addicted to substances (2003). Girls and young women have weight concerns and unhealthy dieting behaviors that may increase their risk for substance abuse, they are more frequently the victims of sexual and physical abuse—another factor that may increase the risk for substance use—and girls that use substances are more likely to be depressed and suicidal. The report also notes that amphetamines leave the body more quickly in the presence of testosterone, which could indicate differential consequences for girls, as the drug may be present in their bodies for longer periods after use. For these reasons, it is imperative to understand differences in the prevalence of substance use in Arizona by gender so that our prevention, treatment and enforcement efforts can account for the differential needs of female and male users.

Consumption by Gender.

Interesting differences in past 30-day substance abuse by gender are noted in this report. In 8th grade, a higher percentage of girls than boys reported the use of numerous substances: alcohol, cigarettes, inhalants, sedatives, stimulants, heroin, methamphetamine, and prescription drugs. However, by 10th grade, the number of substances that a higher percentage of girls reported using was reduced to sedatives, stimulants, methamphetamine, and prescription drugs and by 12th grade, only one substance was used by a higher percentage of girls than boys: methamphetamine. However, when the surveys of respondents from all grades are combined, overall, a higher percentage of girls reported alcohol use, inhalants, sedatives, stimulants, methamphetamine, and prescription drugs than boys. Conversely, a higher percentage of boys reported the use of cigarettes, smokeless tobacco, marijuana, hallucinogens, cocaine, Ecstasy, heroin, and steroids.

It appears that among both girls and boys, as youth progress to higher grades, the percentage of students who reported substance use increased. However, several noteworthy exceptions were seen. The percentage of girls in 8th grade who reported the use of smokeless tobacco was greater than the percentage of 10th graders, which was higher than the percentage of 12th graders who reported such use. In addition, a higher percentage of both boys and girls reported the use of inhalants in 8th grade than they did in 10th and 12th grades. Finally, heroin use among girls appears to be more pervasive in 8th grade than in the 10th and 12th grades.

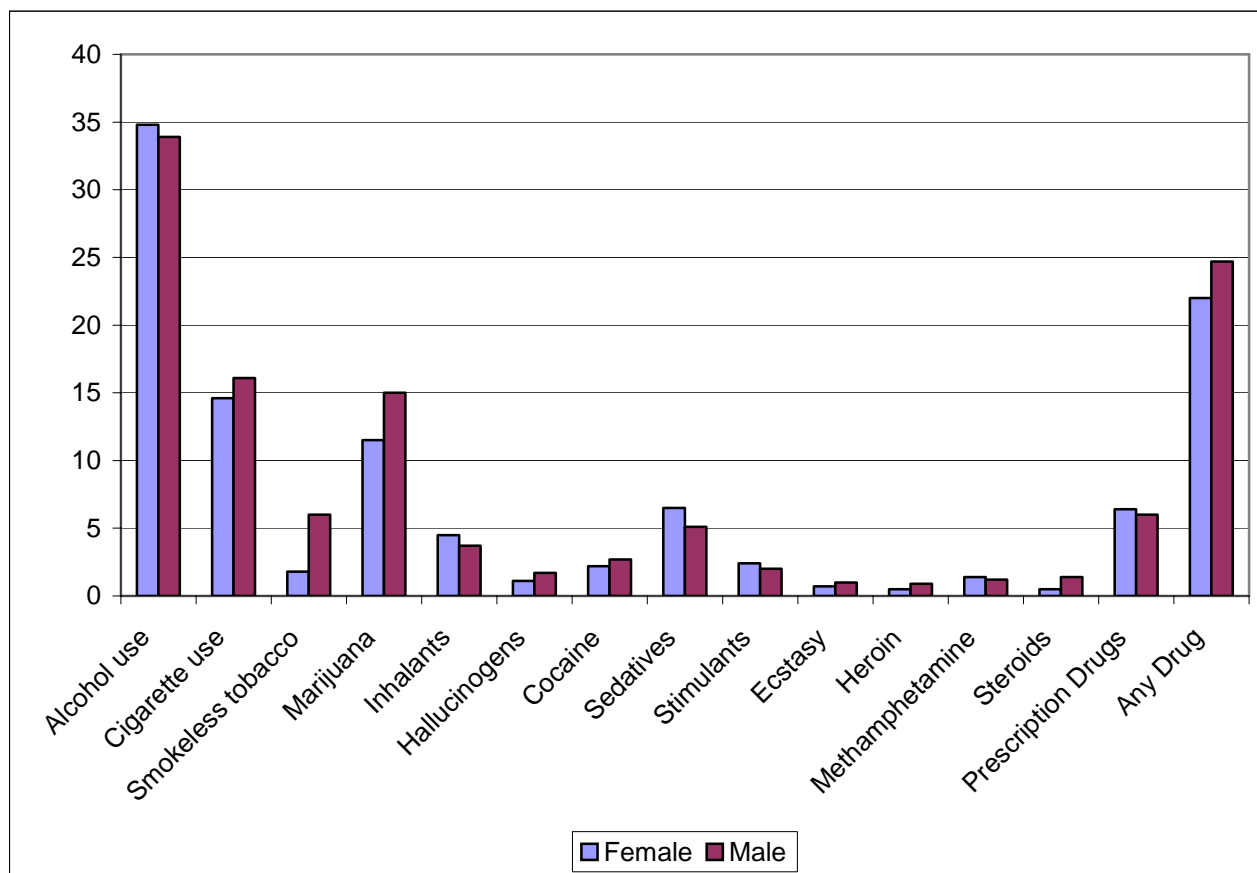
Table 4.107. Percentage of Students Reporting Past 30-day Substance Use by Substance, Grade and Gender, Arizona, 2006

	Grade 8		Grade 10		Grade 12		Total	
	Female	Male	Female	Male	Female	Male	Female	Male
Alcohol use	25.30	22.70	39.80	38.40	45.70	48.50	34.80	33.90
Cigarette use	10.80	10.10	16.20	18.10	19.40	24.40	14.60	16.10
Smokeless tobacco	2.00	3.40	1.70	6.70	1.50	9.60	1.80	6.00
Marijuana	7.90	9.20	13.80	17.80	14.70	21.80	11.50	15.00
Inhalants	7.30	5.00	3.00	3.20	1.30	2.00	4.50	3.70
Hallucinogens	1.00	1.10	1.30	2.20	1.20	2.30	1.10	1.70
Cocaine	1.60	1.60	2.70	3.10	2.70	4.00	2.20	2.70
Sedatives	5.70	3.20	7.50	5.70	6.60	7.60	6.50	5.10
Stimulants	1.80	1.20	3.10	2.70	2.30	2.80	2.40	2.00
Ecstasy	0.70	0.80	0.80	1.30	0.70	1.10	0.70	1.00
Heroin	0.70	0.60	0.50	1.10	0.40	1.10	0.50	0.90
Methamphetamine	1.00	0.90	1.70	1.60	1.50	1.30	1.40	1.20
Steroids	0.60	1.00	0.50	1.60	0.30	1.70	0.50	1.40
Prescription Drugs	5.00	3.90	7.60	6.70	7.40	8.80	6.40	6.00
Any Drug	20.00	19.10	23.80	27.40	22.80	30.40	22.00	24.70

Note. Percentages in bold indicate the gender (within each grade) reporting the highest percentage of past 30-day substance use.

Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

Figure 4.61. Percentage of Students Reporting Past 30-Day Substance Use by Substance and Gender, Arizona, 2006.



Note. 8th, 10th, and 12th grades combined.

Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

Trends seen in lifetime substance use were different than past 30-day substance use. In addition to the substances that a higher percentage of 8th grade girls reported using during the 30 days preceding the survey, a higher percentage of girls also reported hallucinogen, cocaine, and Ecstasy use during their lifetime than did 8th grade boys. Among respondents in the 10th grade, in addition to a higher percentage of girls reporting past 30-day use of sedatives, stimulants, methamphetamine, and prescription drugs, a higher percentage of girls also reported the use of alcohol, inhalants, cocaine, and Ecstasy than did boys. Finally, among 12th grade respondents, in addition to past 30-day methamphetamine use, a higher percentage of girls reported the use of alcohol, sedatives, stimulants, and prescription drugs in their lifetime. These findings could indicate that girls are more likely to try different substances in their lifetime but not as likely to continue to use them (or at least not as likely to use them in the 30 days prior to the survey).

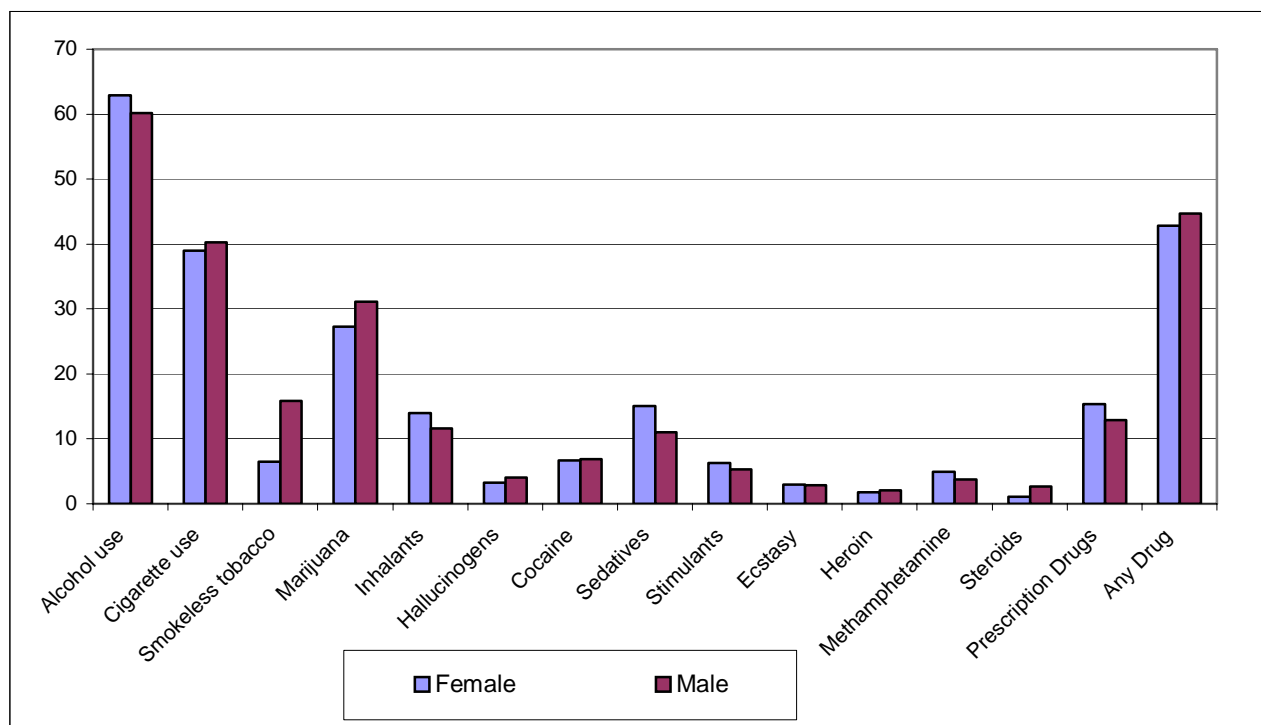
Table 4.108. Percentage of Students Reporting Lifetime Substance Use by Substance, Grade and Gender, Arizona, 2006

	Grade 8		Grade 10		Grade 12		Total	
	Female	Male	Female	Male	Female	Male	Female	Male
Alcohol use	51.70	48.80	69.20	65.80	75.10	73.80	62.90	60.20
Cigarette use	30.90	30.60	43.10	44.80	48.20	51.70	39.00	40.30
Smokeless tobacco	6.10	9.80	6.50	17.60	7.00	24.70	6.50	15.90
Marijuana	17.10	19.40	31.90	36.30	39.70	45.60	27.30	31.10
Inhalants	17.50	12.70	12.80	10.80	9.20	10.60	14.00	11.60
Hallucinogens	2.10	2.00	3.80	4.50	4.40	6.80	3.20	4.00
Cocaine	3.80	3.40	7.70	7.50	10.80	12.30	6.70	6.90
Sedatives	12.30	7.40	16.40	11.80	18.50	16.30	15.10	11.00
Stimulants	4.10	2.70	7.60	6.50	8.60	8.40	6.30	5.30
Ecstasy	2.10	1.60	3.40	3.30	4.00	4.70	3.00	2.90
Heroin	1.60	1.30	1.90	2.30	2.10	3.50	1.80	2.10
Methamphetamine	2.90	2.10	5.60	4.40	7.40	5.70	4.90	3.70
Steroids	1.20	2.10	1.20	2.90	1.00	3.50	1.10	2.70
Prescription Drugs	11.20	8.10	17.60	14.0	20.10	19.70	15.40	12.90
Any Drug	36.60	35.40	45.40	48.50	50.20	55.30	42.80	44.70

Note. Percentages in bold indicate the gender (within each grade) reporting the highest percentage of lifetime substance use.

Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

Figure 4.62. Percentage of Students Reporting Lifetime Substance Use by Substance, Grade and Gender, Arizona, 2006.



Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

In 8th grade, differences are seen between girls and boys in terms of the percentage of youth who reported the simultaneous use of multiple drugs in the past 30 days. Specifically, a higher percentage of girls reported the combined use of tobacco and alcohol, alcohol and any other drug, and tobacco and any other drug in the past 30 days while a higher percentage of 8th grade boys reported combined tobacco and marijuana use, alcohol and marijuana use, and marijuana/tobacco/alcohol use, indicating that 8th grade boys may be more likely to use several substances at once and to use marijuana. Among 10th and 12th grade youth, a higher percentage of boys than girls reported the combined use of tobacco and alcohol; tobacco and marijuana; alcohol and marijuana; marijuana, tobacco and alcohol; alcohol and any other drug; and tobacco and any other drug. The same difference in gender patterns was found for lifetime multiple drug use.

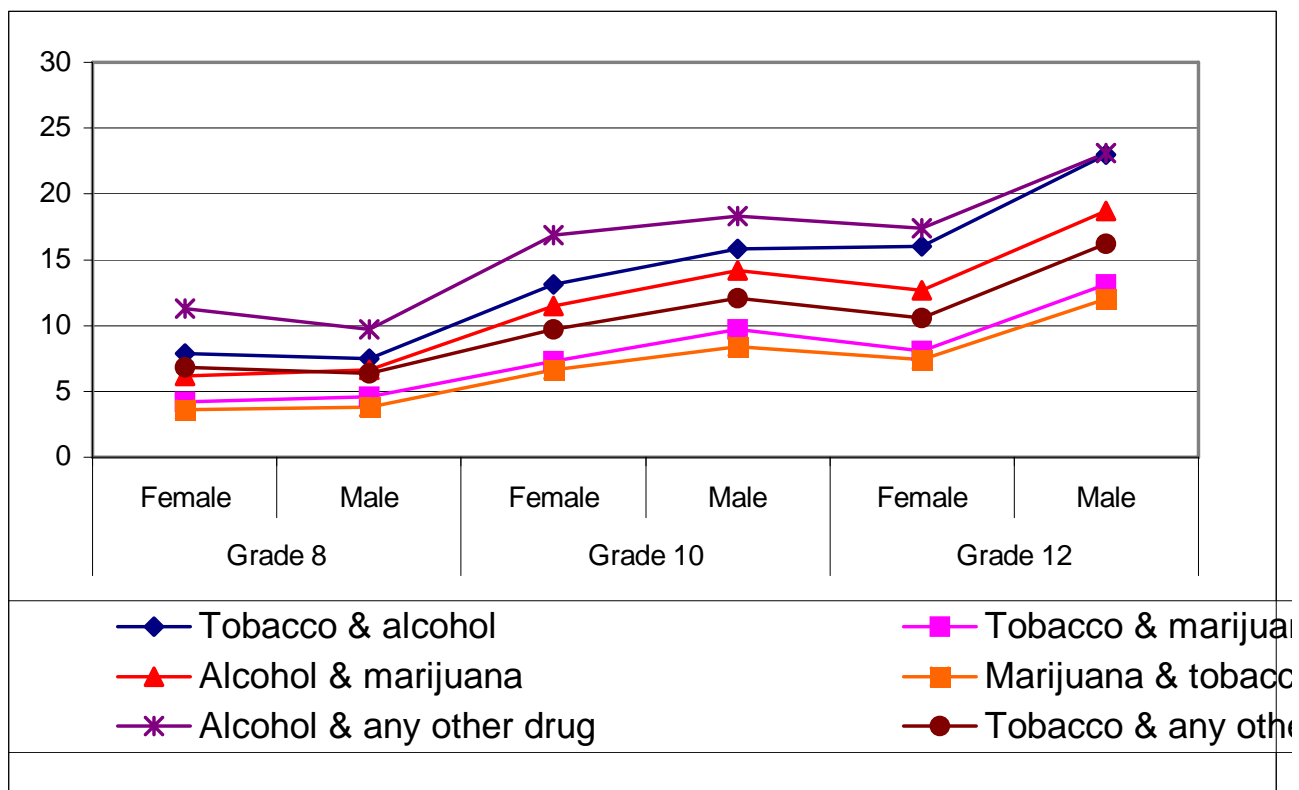
Table 4.109. Percentage of Students Reporting Past 30-Day Multiple Drug Use by Substance, Grade and Gender, Arizona, 2006

	Grade 8		Grade 10		Grade 12	
	Female	Male	Female	Male	Female	Male
Tobacco & Alcohol	7.90	7.50	13.10	15.80	16.00	23.00
Tobacco & Marijuana	4.20	4.60	7.30	9.70	8.10	13.10
Alcohol & Marijuana	6.20	6.60	11.50	14.20	12.70	18.70
Marijuana & Tobacco & Alcohol	3.60	3.80	6.60	8.40	7.40	12.00
Alcohol & Any Other Drug	11.30	9.70	16.90	18.30	17.40	23.10
Tobacco & Any Other Drug	6.80	6.40	9.70	12.10	10.60	16.20

Note. Percentages in bold indicate the gender (within each grade) reporting the highest percentage of past 30-day substance use.

Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

Figure 4.63. Percentage of Students Reporting Past 30-Day Multiple Drug Use by Substance, Grade and Gender, Arizona, 2006.



Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

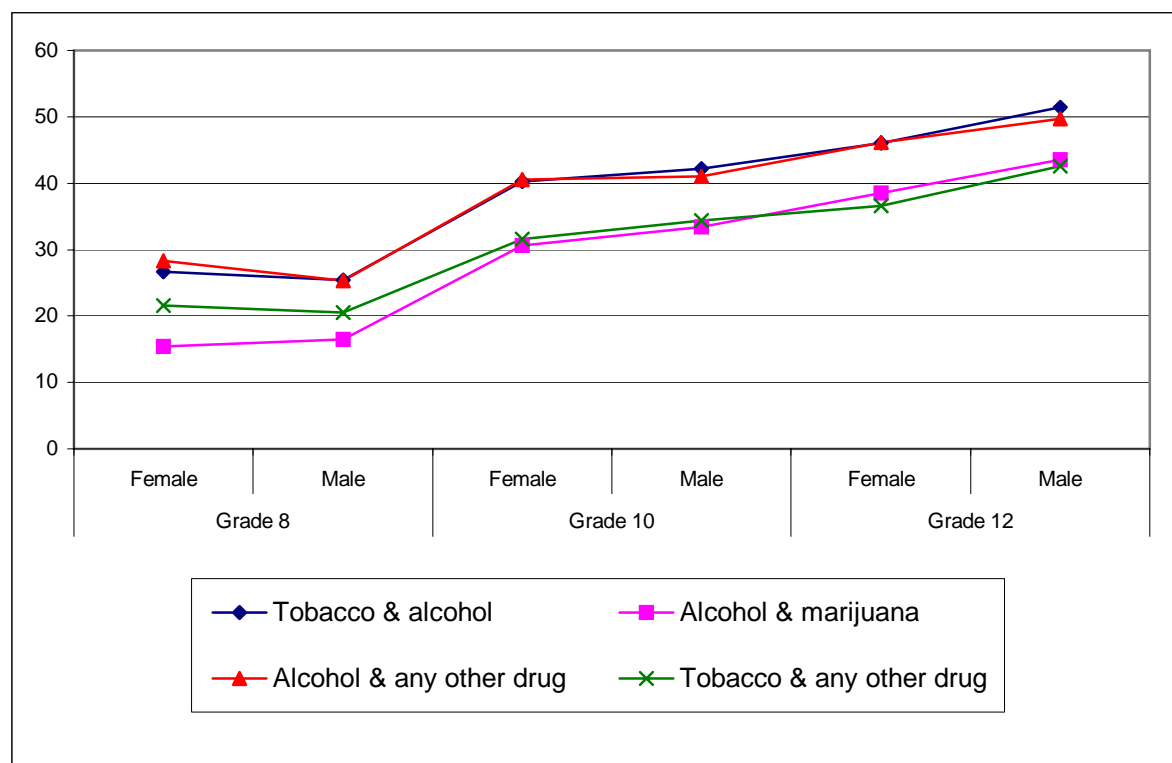
Table 4.110. Percentage of Students Reporting Lifetime Multiple Drug Use by Substance, Grade and Gender, Arizona, 2006

	Grade 8		Grade 10		Grade 12	
	Female	Male	Female	Male	Female	Male
Tobacco & Alcohol	26.70	25.40	40.30	42.20	46.00	51.40
Tobacco & Marijuana	13.90	14.70	25.70	29.40	32.30	38.60
Alcohol & Marijuana	15.40	16.50	30.60	33.40	38.50	43.50
Marijuana & Tobacco & Alcohol	12.90	13.10	25.00	27.70	31.60	37.40
Alcohol & Any Other Drug	28.30	25.30	40.50	41.00	46.10	49.70
Tobacco & Any Other Drug	21.60	20.50	31.60	34.40	36.60	42.60

Note. Percentages in bold indicate the gender (within each grade) reporting the highest percentage of lifetime substance use.

Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

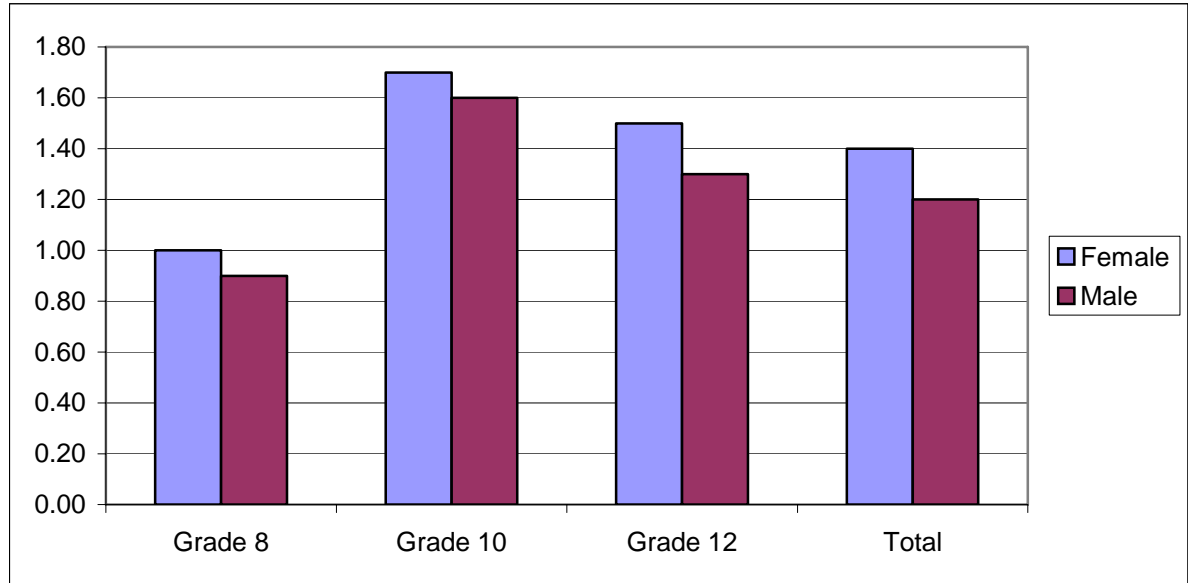
Figure 4.64. Percentage of Students Reporting Lifetime Multiple Drug Use by Substance, Grade and Gender, Arizona, 2006



Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

We find that while higher percentages of boys in Arizona report overall substance use, higher percentages of girls reported past 30-day use of methamphetamine at 8th, 10th and 12th grades (Figure 4.65) (*Arizona Youth Survey: State Report, 2006*). Not only are higher percentages of girls reporting methamphetamine use but they may be more susceptible to becoming addicted to the substance than boys (National Center on Addiction and Substance Abuse at Colombia University, 2003).

Figure 4.65. Percentage of Students Reporting Past 30-Day Methamphetamine Use by Substance, Grade and Gender, Arizona, 2006.



Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

Hospital Discharges and Emergency Department Visits by Gender.

Finding: With the exception of a first-diagnosis listing of drug dependence and drug abuse for both hospital discharges and Emergency Department visits, more males than females were visiting hospitals and Emergency Departments for alcohol and drug disorders.

Table 4.111. Hospital Discharges and Emergency Department (ED) Visits by Disorder and Gender, Arizona, 2005

	Female	Male
Hospital Discharges	N	N
Non-dependent abuse of alcohol [*]	2,482	6,453
Alcohol dependence [*]	3,263	8,461
Alcoholic psychoses [*]	1,172	3,515
Non-dependent abuse of drugs [*]	6,368	8,541
Drug dependence [*]	3,196	3,565
Drug psychoses [*]	1,848	1,882
Drug dependence and drug abuse ^{**}	3,429	2,894
Total Hospital Discharges	21,578	35,311
ED Visits	N	N
Non-dependent abuse of alcohol [*]	5,667	13,465
Alcohol dependence [*]	1,624	5,493
Alcoholic psychoses [*]	324	1,335
Drug dependence and abuse ^{**}	7,326	7,276
Total ED Visits	14,941	27,569

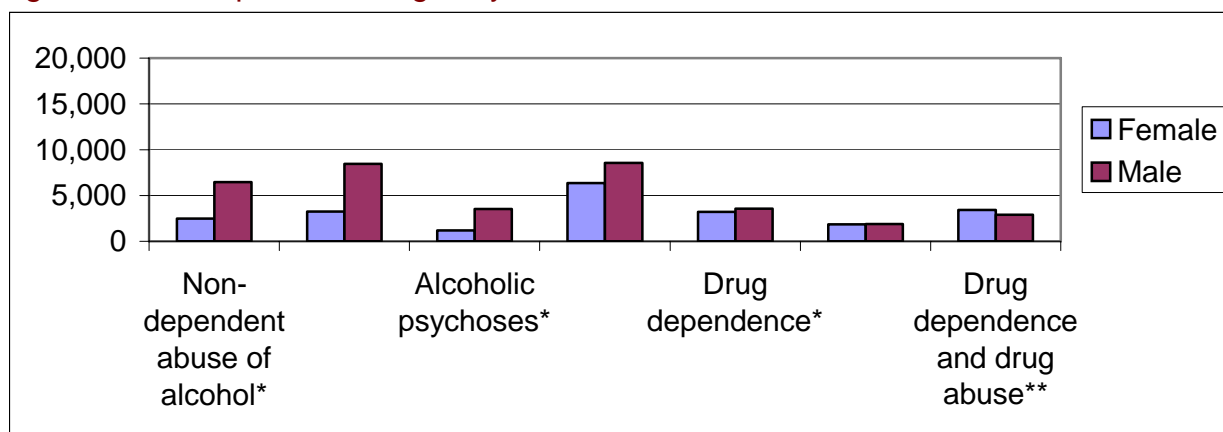
Note. Numbers in bold indicate the gender reporting the highest incidence of hospital discharges and Emergency Department visits.

^{*} All mentions

^{**} First-listed diagnosis

Source: *Arizona Health Status and Vital Statistics*, Arizona Department of Health Services.

Figure 4.66. Hospital Discharges by Disorder and Gender, Arizona, 2005.

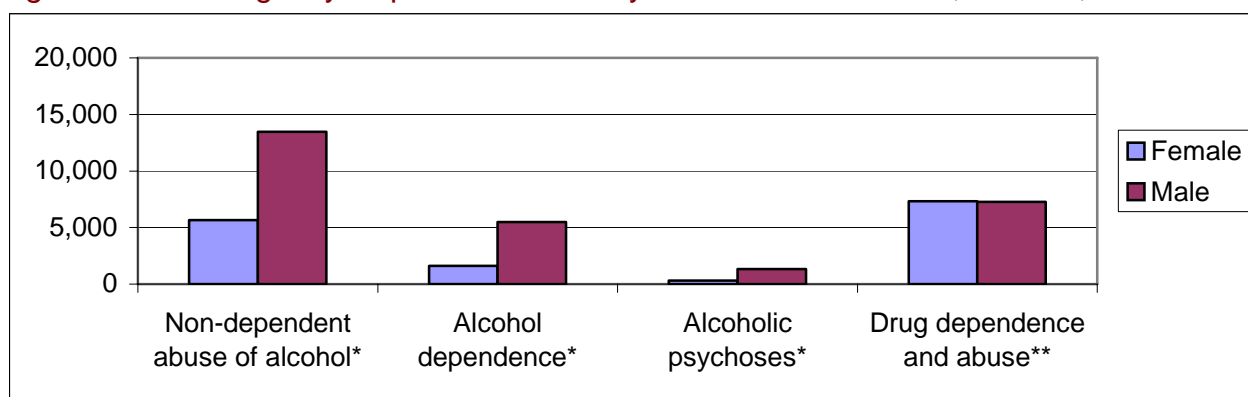


* All mentions

** First-listed diagnosis

Source: *Arizona Health Status and Vital Statistics*, Arizona Department of Health Services.

Figure 4.67. Emergency Department Visits by Disorder and Gender, Arizona, 2005.



* All mentions

** First-listed diagnosis

Source: *Arizona Health Status and Vital Statistics*, Arizona Department of Health Services.

Alcohol-Related Motor Vehicle Crashes by Gender.

Four times as many males were involved in alcohol-related fatalities and injury and property damage-causing accidents than were females. When examining just those alcohol-related crashes caused by females, we note that a higher percentage of women were involved in accidents causing property damage than those involving fatalities or injuries. More males were involved in alcohol-related fatalities than those causing injuries or property damage.

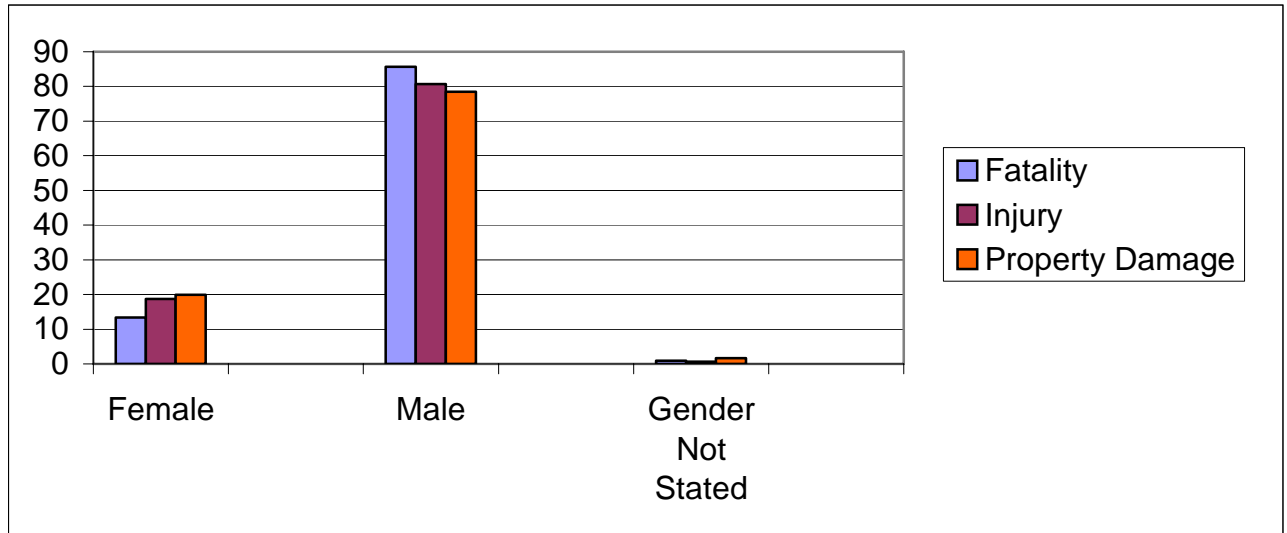
Table 4.112. Alcohol-Related Crashes by Type of Accident and Driver Gender, Arizona, 2005

Type of Accident	Driver Gender				Gender Not Stated	
	Female		Male			
	N	%	N	%	N	%
Fatality	29	13.36	186	85.71	2	0.92
Injury	648	18.74	2,789	80.65	21	0.61
Property Damage	810	19.88	3,196	78.43	69	1.69

Note. Numbers in bold indicate the gender involved in the highest percentage of alcohol-related fatal, injury, and property damage-causing accidents.

Source: *Arizona Motor Vehicle Crash Facts*, 2005, Arizona Department of Transportation.

Figure 4.68. Alcohol-Related Crashes by Type of Accident and Driver Gender, Percentages, Arizona, 2005.



Source: *Arizona Motor Vehicle Crash Facts*, 2005, Arizona Department of Transportation.

Drug and Alcohol-Related Arrests by Gender.

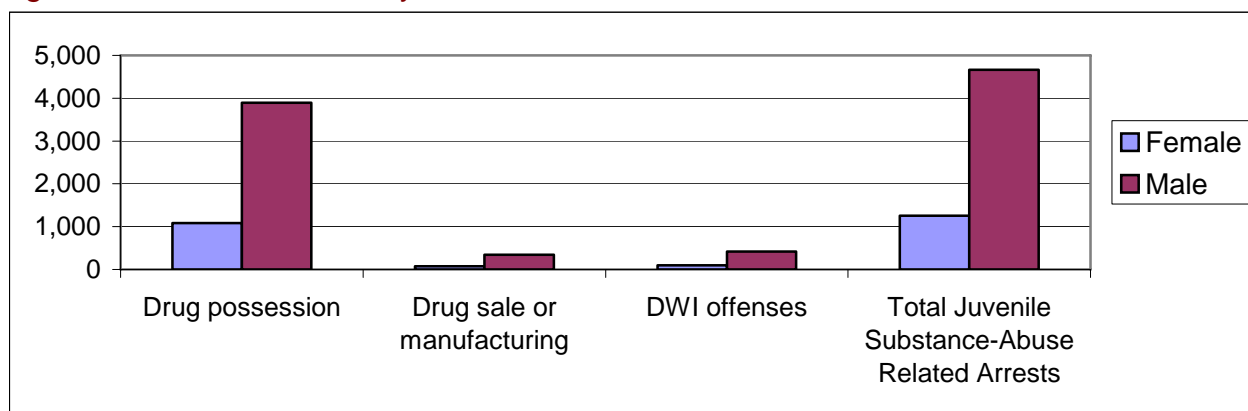
Finding: There were almost four times as many male youth arrested for substance-related crimes as female youth, the same pattern as that for adult offenders.

Table 4.113. Youth and Adult Arrests by Arrest Offense and Gender, Arizona, 2005

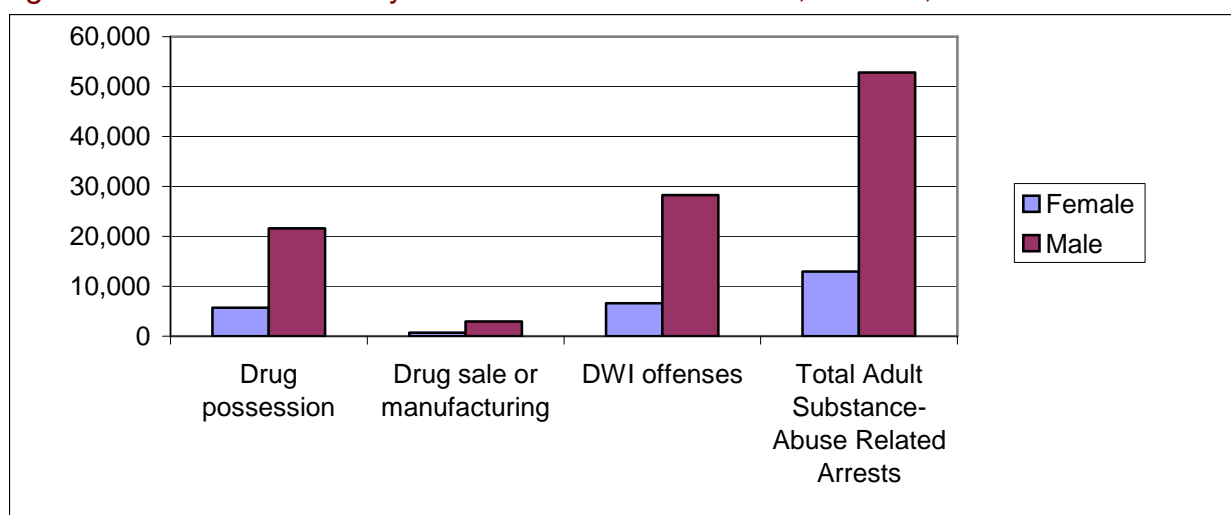
	Gender of Offender	
	Female	Male
	N	N
Juveniles		
Arrests		
Drug possession	1,085	3,894
Drug sale or manufacturing	72	345
DWI offenses	95	421
Total Juvenile Substance-Abuse Related Arrests	1,252	4,660
Adults		
Arrests		
Drug possession	5,674	21,597
Drug sale or manufacturing	701	2,936
DWI offenses	6,598	28,261
Total Adult Substance-Abuse Related Arrests	12,973	52,794

Note. Numbers in bold indicate the gender with the highest incidence of substance-related arrests.

Source: *Crime in Arizona, 2005*. Arizona Department of Public Safety.

Figure 4.69. Youth Arrests by Arrest Offense and Gender, Arizona, 2005.

Source: *Crime in Arizona, 2005*. Arizona Department of Public Safety.

Figure 4.70. Adult Arrests by Arrest Offense and Gender, Arizona, 2005.

Source: *Crime in Arizona, 2005*. Arizona Department of Public Safety.

Problem Indicators by Gender Summary: With the exception of a first-diagnosis listing of drug dependence and drug abuse for both hospital discharges and Emergency Department visits, more males than females were seeking hospital or ED treatment for alcohol and drug disorders. In addition, more male youth were arrested for substance-related crimes than female youth, a pattern that was also true for adult offenders.